

The Nursing Network

Regional Development Committee (RDC)¹ in Southern Laos*

Introduction

The supply of fish seed to small-scale farmers is a major constraint to the development of aquaculture in Laos and although there are a number of Government operated fish breeding centres (fish hatcheries), the countries poorly developed infrastructure leads to major problems with seed distribution.

Developing a solution to this problem was the first major collaborative activity undertaken between the Lao Government and the AIT Aqua Outreach Programme. Farmer trials were conducted by provincial staff from the Livestock and Fisheries (LandF) Section in Savannakhet province to test a simple aquaculture technique developed by the Outreach Programme in Northeast Thailand. The technique enables farmers to nurse fish seed (fry) in a nylon bag (hapa) suspended in a farmers pond and LandF Section staff used this technique to develop a network of fish seed "middlemen". In 1994, 18 farmers were trained in the technique and encouraged to purchase small fish seed from the provincial Government fish hatchery at Pak Bor. The trials went well and the Network members found a ready market among local farmers for the much larger fish seed they were able to produce after six weeks of intensive care in a hapa. In following years interest in the scheme grew and was also adopted by other development projects. The Network currently has over 70 members in 15 districts and similar networks have started to develop in at least two other provinces.

History and approach

The introduction of hapa technology

The introduction of the hapa into the day-to-day operation of the Savannakhet provincial fish hatchery at Pak Bor, was a milestone in the development of aquaculture in Savannakhet. In 1993 there was very little aquaculture in Southern Laos, but in the more established rice growing regions of Savannakhet increasing environmental degradation and population pressure meant that there was an enormous interest in developing ways to farm the main source of protein for the Lao people - fish.

Although not new to the Lao PDR, hapas were not used to any significant extent in aquaculture and there were no established methods for stocking and rearing fish in them. However, after their introduction to the Pak Bor hatchery together with advice on how to use them, they were rapidly integrated into normal operations as they represented a practical and inexpensive solution to the problems associated with managing the relatively large earthen ponds at the hatchery. The hapa also has similar advantages for small-scale farmers. It enables them to cheaply and easily intensify part of their fish farming practices, without making extensive modifications to existing resources such as their ponds or rice fields.

¹ Established by the Department of Livestock and Fisheries in Savannakhet Province LaoPDR in 1997, the RDC is an institutional experiment. It is the Lao Government's first regional-level development agency bringing together resources and expertise for the development of Southern Laos. Partners in this Alliance work within a common framework that provides a structured and culturally appropriate forum for development.

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Establishing the first Network

A reconnaissance of aquatic resource management systems in Savannakhet province undertaken during the early stages of collaboration between the AIT Aqua Outreach Programme and Savannakhet LandF Section, confirmed earlier conclusions that there was a rapidly growing interest among small-scale farmers in aquaculture. The main constraint to development was identified as the availability of fish seed and in 1994, with assistance from the Outreach Programme, Savannakhet LandF Section established a small group of farmers who were encouraged to act as "middlemen" between the provincial Government fish hatchery and local farmers.

These middlemen were given training in fry nursing techniques using a hapa, and encouraged to set-up a small operation on their farms nursing fish purchased from Pak Bor and then selling them onto local farmers. The scheme worked well and all of the farmers were able to nurse and sell fish in small quantities to local farmers. Farmers participating in the scheme were issued with membership cards by the Provincial LandF Section office and all the farmers were given a T-shirt with the newly designed Pak Bor hatchery logo on the front. Regular contacts were maintained between the farmers and provincial staff and farmers were encouraged to stay in contact with each other. This they managed to do despite what many people would consider some major logistical and communication difficulties.

Solving seed transportation problems

The transportation of nursed fish was a problem, as there are no indigenous methods of fish seed transport. The possibility of using plastic bags and bottled oxygen was not possible, as these were not locally available and too expensive for the members to acquire. During the members training workshop held at Pak Bor, the issue of transportation was discussed and trials were conducted with locally available materials to find a method of transporting nursed fish in open containers. This is a widespread practice in countries such as Vietnam and Bangladesh, where the techniques have been developed to a fine art. However, the details of these techniques did not particularly interest the Lao farmers who were mostly of the opinion it was irrelevant to their situation. Their interest was stimulated however, when during one of the training sessions, it was suggested that the farmers try to develop their own technique. All 18 farmers enthusiastically designed and participated in their own seed transportation trails which perhaps more than any other factor made the farmers "participants" in a development process rather than passive recipients of technical information or development assistance.

Developing training capacity

The Nursing Network training workshop was the first training event provincial staff had undertaken which deliberately aimed to encourage participation from the trainees and made a radical move away from the traditional "chalk and board" approach which was then the norm. During the follow-up of the 1994 network members the benefits of this more participatory approach to training became apparent as Section staff discovered among other things, that many of the farmers had conducted further transportation trials with their own fish. The farmers took great pride in explaining the techniques to provincial fisheries specialists who later were able to incorporate this information in other farmer training events. As well as a method of evaluating the success of the Nursing Network scheme, the follow-up of these initial 18 farmers, laid the foundation for the further development of training methods by LandF Section staff and their approach to working with farmers.

Developing a poverty focus

The selection of farmers for the Network training in 1994 specifically targeted poor farmers. The Nursing Network "package" was seen by LandF Section provincial staff as an intervention which was low-cost, low-risk, simple and farmers were not required to own a pond (they could use any public water bodies, relatives ponds and rice fields). This made the scheme appropriate for the poorer farmers in the community, but during the selection process provincial staff had some difficulties in persuading poor farmers to participate. The initiative had been given a high profile in the province and both district officers and village elders were keen to cooperate. However, these very positive intentions towards the initiative made the poorer families nervous and many did not want to join the

scheme because they were worried about failure and the attention they would receive in becoming a participant. They wanted to wait and learn from the experiences of other more affluent families first. In the end, the Nursing Network managed to attract some poor farmers in the first year, but it was clear that maintaining a poverty focus for the scheme was not as simple as had first been envisaged.

Delegating responsibility

In 1995 the success of the scheme during 1994 prompted provincial staff to expand the scheme to other districts and increase membership. The 1994 initiative had been mostly planned and organized by provincial staff, but it was now clear if the scheme was to be expanded, the development of the Network would have to become the responsibility of district officers. Provincial staff could not devote the necessary time and resources required to coordinate and monitor an expanded scheme. In addition, it is government policy that these types of initiatives should be more the responsibility of District rather than Provincial officers. However, this realization created some problems, as although the nursing technology is simple and robust, the development, administration and monitoring of the network is quite complex. It requires knowledge and skills, which district officers did not yet have and it had taken the provincial staff themselves nearly two years to develop.

Developing collaboration with NGOs

To expand the Network and develop additional development initiatives in fisheries, provincial staff now realized they had to focus more effort on developing the capacity of District staff. With this in mind, the Head of Savannakhet LandF Section approached Oxfam (an international NGO working in the Lao PDR) and suggested they fund a training course for district officers. This they agreed to do for LandF Section staff from all 13 Districts of Savannakhet province. The training provided district staff with some basic fisheries training, but for the first time, also included some basic training in office administration and financial management. Although positively received by the district staff, the event exposed a number of weaknesses in the provincial staff's capacity to organize training events for their own staff and develop curricula in non-technical subjects.

Developing systems of incentives

Following the Oxfam sponsored training event, provincial fisheries staff organized a series of mini-workshops at the district level in which they assisted district staff to plan and organize trainings for farmers wishing to become new members of the network [ACT 8044]. The workshops were an opportunity for provincial staff to explain how district staff should administer and monitor the network and also establish a system whereby district officers could receive some benefit for their efforts. Although the development of such a benefit system was slightly outside accepted Government norms, salaries are so low in Laos that officers have to find ways of supplementing their income. The common method of dealing with this problem is for donors to provide district officers with per diem. However, monitoring how this per diem is used is difficult and for many staff in remote districts, per diem payments are often seen as a bonus for the difficult and demanding work they are already doing.

To expand the nursing network, the challenge was to find a way of linking benefits with results and provincial staff developed a mechanism during 1995, which concerned the provision of hapas farmers wishing to join the network. From the beginning of the scheme, it was assumed that farmers do not look after "gifts" and although donor funds were available for the provision of hapas to farmers, LandF Section staff thought it would be better not to provide farmers with free inputs for the scheme. Instead, the staff decided to use donor funds to purchase blue netting for each district office from which the staff could make hapas. They were then requested to officially notify the provincial office of the number of hapas they had made and in doing so officially made them "Government equipment".

District offices were then encouraged to rent-out the hapas to farmers wishing to participate in the network for the first time and in doing so the officers were able to generate income for their district office. They were entitled to use this income to purchase stationary or pay themselves per diem, but they were asked to keep accounts of how the funds generated and how they were used. This system was popular among district officers and had the additional benefit of attracting farmers to the scheme

who were unable to make the investment of purchasing a hapa. It also put to use some of the practical skills they had been taught concerning hapa manufacture and built on the formal training they had received in basic administration and office management.

Expanding the scheme

During 1995 Savannakhet provincial staff monitored the Nursing Network scheme and a system of data recording and collection was established to develop the capacity of district staff in this area of their work. The scheme was popular amongst farmers and was an effective way of introducing into an area some basic aquaculture techniques and improving the availability of fish seed. At the institutional level, it was also acted as a catalyst for making significant improvements in the general capacity of district staff. In 1996 the Provincial Section continued to develop the scheme with increasing emphasis on using the scheme as a means for developing district staff capacity.

Monitoring of the scheme in 1995 had revealed that district officers were not following guidelines on farmer selection and the original poverty focus of the scheme was being compromised. In an attempt to improve the situation, provincial staff developed written guidelines on the subject during district-level workshops held in 1996, and encouraged district staff to recruit farmers in more remote villages. During the 1996 fish growing season two students also joined provincial staff to study the Network and its development. One was a final year student for Na Bong Agricultural College in Vientiane (now the National Agricultural University) and the other was a Master's student from AIT in Bangkok. The students documented in detail how the Network had developed and its status in 1996/97.

Moving to more remote areas

The development of the network in 1997 moved out of the Savannakhet lowlands into the more remote and poorer upland districts of the province. The provincial staff's increased training capacity, improvements in district-province communication and the development of district-level monitoring systems meant that provincial staff could now realistically consider turning their attention to these more remote areas. The NGO Oxfam agreed to support the LandF Section's new initiative in these areas and district-level training workshops were organized in four more districts.

Maintaining a focus

By 1997 the number of farmers in the Network had reach 109. With increasing responsibility for Network administration and monitoring being moved to the District level, the "Network" was now really composed of a number of small District networks. Provincial staff was monitoring these and in 1997 they decided to establish provincial guidelines on network development. It was clear from the monitoring data that most network members were not staying with the scheme year after year, but instead saw it as a chance to "enter" aquaculture and gain experience. This was in-line with the objectives of the scheme and provincial staff encouraged their district counterparts to attract new entrants. For the first time a regulation was introduced into the scheme, which stated that district offices could now only loan hapas to new members. Later in the year an additional regulation was introduced concerning the poverty focus of the scheme. District officers were instructed to specifically target families without ponds and rice land. Improved training materials were also developed during 1998 and a focus on the upland area was continued with support from Oxfam.

Developing other Networks

As early as 1995 there was interest in the Savannakhet Nursing Network scheme from neighboring provinces. Provincial fisheries staff in Kammmouane province was eager to try out the scheme and they made a formal request to their counterparts in Savannakhet for assistance in developing a similar initiative. The Savannakhet staff organized a training workshop at the Pak Bor provincial fisheries station, which mainly focused on the technical issues concerning fry nursing. It was the first time Savannakhet staff had organized a training workshop for Government staff in another province and they instinctively organized an event, which would have been appropriate to farmers, but unfortunately did little to communicate to their Kammmouane counterparts how to establish and

administer such a network. With hindsight this is an obvious mistake, but at the time "training" to most people meant "technical training", as this had so far been their experience.

Later in 1997, Savannakhet staff assisted their Kammouane counterparts to undertake a critical review of their efforts to establish a nursing network in Kammouane province and developed a number of recommendations on how Kammouane staff could improve the way in they manage and monitor such a network. In 1998 Champasak province also expressed interest in developing a Nursing Network and Savannakhet staff this time addressed the issues of network establishment, administration and management much more effectively. The scheme also attracted attention from a development project in Northern Laos and one of the Savannakhet staff traveled to Bokeo to advise provincial staff on establishing a similar scheme.

While the efforts of Savannakhet staff have been successful in assisting their counterparts in other provinces to train farmers in fish nursing techniques and establish small nursing networks, network schemes have not developed at the district level as they have in Savannakhet. LandF Section staff in other provinces have not yet been able to devise mechanisms for delegating responsibility for network development to district staff and this has severely limited network growth and sustainability. Although provincial Savannakhet staff understood the importance of district participation in the Nursing scheme in 1995, its importance was not fully realised until later. In Savannakhet the nursing network scheme sparked a district-level capacity building initiative, which in turn, acted as catalyst and an institutional "pull" for further Network expansion.

This capacity building work is still continuing in Savannakhet with support of a number of donor projects, but in other provinces their aims in requesting assistance from Savannakhet have been more modest. Kammouane and Champasak have field tested the nursing technology and until recently, have not seriously considered work on general district-level capacity building. These provinces have not had the long-term presence of the AIT Aqua Outreach Programme that specifically targets the development of institutional capacity. Most Provincial staff are poorly equipped to undertake the tasks such as the development of in-house training curricula in non-technical subjects or developing reward systems for increasing staff motivation. Their background and formal education have done little to prepare them for these tasks and current opportunities for staff training are still very much orientated towards improving expertise in specific technical areas (e.g. aquaculture, fisheries, animal disease or livestock rearing). One of the main reasons for the development of the RDC concept in 1997 was to find better ways in which Savannakhet provincial staff could assist their counterparts in other provinces to develop district level capacity. With good reasons, this is seen as a priority by the Lao Government authorities and the formal establishment of the RDC in 1999 marked the beginning of a new interdisciplinary capacity building initiative which will span all six southern provinces.

Donor coordination

In 1998 a nationwide FAO/UNDP sponsored fisheries development project looked at the work done on developing fish seed nursing strategies by Savannakhet LandF Section, and decided to promote hapa nursing of fish seed in other provinces of the Lao PDR. They also assisted Savannakhet LandF Section staff to further promote the nursing network scheme, although in a slightly modified form. The project assisted provincial staff to experiment with farmers nursing fry in small groups and also reducing the size of the hapa. The additional support from FAO and the continued support from Oxfam and AIT Aqua Outreach meant that Savannakhet now had three development institutions assisting the LandF Section. This created some problems for the provincial staff as each project had their own slightly different development agenda. The experience of trying to coordinate these donor inputs during 1998 and 1999, brought provincial staff to the general conclusion that effective donor coordination was now becoming increasingly important to the future development of the Nursing scheme.

Section staff also realized that they required a longer-term vision for the development of the Nursing Network and one, which included collaboration with other provinces. In 1999, Savannakhet provincial staff agreed to coordinate all future donor inputs into the scheme through the newly established Regional Development Committee (RDC). The RDC is now in a position to assist Savannakhet with

donor coordination and it is also an appropriate forum for the development of the longer-term vision required for the scheme's future development. The close involvement of Savannakhet provincial staff in the development of the RDC means that the future development of the scheme is likely to become one of the RDC's first truly regional development initiatives.